Rec'd PCT/PT@ 3 0 DEC 2004

Original (for SUBMISSION) - printed on 24.06.2003 11:02:58 AM

International Application No.	ō	I Farmer Library Office was only			
International Filing Date 24 6		For receiving Office use only	PCT		
Name of receiving Office and 'PCT International Application' D4 Form - PCT/RO/101 PCT Request (updated 01.01.2003) D5 Petition The undersigned requests that the present international application be processed according to the Patent (Cooperation Treaty) D6 Receiving Office (specified by the applicant) D7 Applicant's or agent's file reference R03089 PCT Title of invention HEAD CONTROLLER, INKJET RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS THAT PREVENT DEGRADATION IN IMAGE (UALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES) II Applicant II-1 This person is: applicant only all designated States except US RICOH COMPANY, LTD. 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan JP State of residence JP Telephone No. 03-3777-8111 Pacsimile No. 03-3777-8111 This person is: applicant and inventor III-1 Applicant and/or inventor This person is: applicant and inventor	0-1	International Application No.	216.00		
Name of receiving Office and 'PCT International Application' Permaned using PCT-EASY Version 2.92 (updated 01.01.2003) Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty Permaned United Septified by the applicant's or agent's file reference R03089 PCT Title of invention HEAD CONTROLLER, INKJET RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS, A	0-2	International Filing Date	受領印		
Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty Deferition The undersigned requests that the processed according to the Patent Cooperation Treaty Defermine applicant of Exercising Office (specified by the applicant) Title of invention Defermine applicant on Image Recording apparatus of Exercising Applicant on Image of Ex	0-3				
Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty Defectiving Office (specified by the applicant) Title of invention Title of invention Applicant Applicant This person is: Applicant for Name RICOH COMPANY, LTD. Address: State of nationality II-6 State of residence JP Telephone No. 19-9 Facsimile No. Petition The undersigned requests that the present of the presence (updated 01.01.2003) Pott (updated 01.01.2003) Pott (updated 01.01.2003) Pott (updated 01.01.2003) Japan Patent Office (RO/JP) Japan Patent Office (RO/	-	1			
Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty Defectiving Office (specified by the applicant) Title of invention Title of invention Applicant Applicant This person is: Applicant for Name RICOH COMPANY, LTD. Address: State of nationality II-6 State of residence JP Telephone No. 19-9 Facsimile No. Petition The undersigned requests that the present of the presence (updated 01.01.2003) Pott (updated 01.01.2003) Pott (updated 01.01.2003) Pott (updated 01.01.2003) Japan Patent Office (RO/JP) Japan Patent Office (RO/	0-4	Form - PCT/RO/101 PCT Request			
(updated 01.01.2003) Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty Petition Receiving Office (specified by the applicant) Processed according to the Patent Cooperation Treaty Receiving Office (specified by the applicant) Processed according to the Patent Cooperation Treaty Receiving Office (specified by the applicant) Processed according to the Patent Cooperation Treaty Receiving Office (specified by the applicant) Receiving Office (specified	0-4-1		PCT-FASY Version 2 92		
Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty D-6 Receiving Office (specified by the applicant) D-7 Applicant's or agent's file reference I Title of invention HEAD CONTROLLER, INKJET RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS THAT PREVENT DEGRADATION IN IMAGE QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES II Applicant II-1 This person is: II-2 Applicant for II-4 Name II-5 Address: II-5 Address: II-6 State of nationality II-7 State of residence II-8 Telephone No. II-8 Telephone No. II-9 Facsimile No. III-1 Applicant and/or inventor III-1-1 This person is: III-1 Applicant and inventor					
present international application be processed according to the Patent Cooperation Treaty 0-6 Receiving Office (specified by the applicant) 0-7 Applicant's or agent's file reference I Title of invention HEAD CONTROLLER, INKJET RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS THAT PREVENT DEGRADATION IN IMAGE QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES II Applicant II-1 This person is: applicant only all designated States except US II-2 Applicant for all designated States except US II-4 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor	0-5	Petition	(1)		
applicant) 0-7 Applicant's or agent's file reference R03089 PCT		present international application be processed according to the Patent Cooperation Treaty			
Title of invention HEAD CONTROLLER, INKJET RECORDING APPARATUS, AND IMAGE RECORDING APPARATUS THAT PREVENT DEGRADATION IN IMAGE QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES II Applicant II-1 This person is: applicant only all designated States except US II-2 Applicant for II-3 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality IJP II-7 State of residence IJP II-8 Telephone No. II-9 Facsimile No. II-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor	0-6	applicant)	Japan Patent Office (RO/JP)		
APPARATUS, AND IMAGE RECORDING APPARATUS THAT PREVENT DEGRADATION IN IMAGE QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES II Applicant II-1 This person is: II-2 Applicant for II-4 Name II-5 Address: II-6 State of nationality II-7 State of residence II-8 Telephone No. II-9 Facsimile No. III-1 Applicant and/or inventor III-1-1 This person is: APPARATUS, AND IMAGE RECORDING APPARATUS THAT PREVENT DEGRADATION II MAGE QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES Applicant only all designated States except US RICOH COMPANY, LTD. 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-7 State of nationality IP II-1 Applicant and/or inventor III-1-1 This person is: Applicant and inventor					
THAT PREVENT DEGRADATION IN IMAGE QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES II Applicant II-1 This person is: II-2 Applicant for all designated States except US II-4 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor	Ī	Title of invention	HEAD CONTROLLER, INKJET RECORDING		
QUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES II Applicant This person is: Applicant for all designated States except US III-4 Name RICOH COMPANY, LTD. III-5 Address: Address: Address: Japan III-6 State of nationality III-7 State of residence III-8 Telephone No. III-9 Facsimile No. OUALITY DUE TO ENVIRONMENTAL TEMPERATURE CHANGES Applicant only all designated States except US RICOH COMPANY, LTD. 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan JP III-1 State of residence JP III-1 Applicant and/or inventor IIII-1 This person is: Applicant and inventor			APPARATUS, AND IMAGE RECORDING APPARATUS		
II Applicant II-1 This person is: applicant only II-2 Applicant for all designated States except US II-4 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor					
Applicant This person is: applicant only all designated States except US II-2 Applicant for all designated States except US II-4 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor					
II-1 This person is: applicant only all designated States except US II-4 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor applicant and inventor	-11	Applicant	CHANGES		
Applicant for all designated States except US II-4 Name RICOH COMPANY, LTD. II-5 Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor		· · ·	ampliant out		
Name		' ·	-		
Address: 3-6, Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan JP	11-4				
Ohta-ku, Tokyo 143-8555 Japan II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor	11-5	Address:	. •		
II-6 State of nationality JP II-7 State of residence JP II-8 Telephone No. 03-3777-8111 II-9 Facsimile No. 03-5742-5429 III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor					
	11-6	State of nationality			
Telephone No. 03-3777-8111 11-9 Facsimile No. 03-5742-5429 111-1 This person is: applicant and inventor	II-7	State of residence	1		
Facsimile No. 03-5742-5429 III-1	II-8	Telephone No.	177		
III-1 Applicant and/or inventor III-1-1 This person is: applicant and inventor	11-9	Facsimile No.			
applicant and inventor	III-1	Applicant and/or inventor			
	111-1-1	This person is:	applicant and inventor		
Ing outh	III-1-2	Applicant for	US only		
NoDA, Hiroshi	III-1-4	Name (LAST, First)	<u> </u>		
III-1-5 Address: 5-8-201, Saiwaicho,	III-1-5	Address:	·		
Atsugi-shi, Kanagawa 243-0012			·		
Japan					
III-1-6 State of nationality JP	III-1-6	State of nationality	1 -		
III-1-7 State of residence JP	III-1-7	State of residence	JP		

PCT REQUEST

Original (for SUBMISSION) - printed on 24.06.2003 11:02:58 AM

IV-1	Agent or common representative; or address for correspondence The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the	agent	
IV-1-1	competent International Authorities as: Name	ITOH, Tadahiko	
IV-1-2	Address:	32nd Floor, Yebisu Garden Place Tower, 20-3, Ebisu 4-chome, Shibuya-ku, Tokyo 150-6032	
		Japan	
IV-1-3	Telephone No.	03-5424-2511	
IV-1-4	Facsimile No.	03-5424-2525	
V	Designation of States		
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	EP: AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI SK TR and any other State which is a Contracting State of the European Patent	
		Convention and of the PCT	
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	CN KR SG US	
V-5	Precautionary Designation Statement		
V-6	In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	NOVE.	
V-0	designations	NONE	
VI-1	Priority claim of earlier national application	*	
VI-1-1	Filing date	16 July 2002 (16.07.2002)	
VI-1-2	Number	Patent Application 2002-206377	
VI-1-3	Country	JP	
VI-2	Priority document request		
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1	
VII-1	International Searching Authority Chosen	Japan Patent Office (JPO) (ISA/JP)	

R03089 PCT

Original (for SUBMISSION) - printed on 24.06.2003 11:02:58 AM

VIII	Declarations	Number of declarations				
VIII-1	Declaration as to the identity of the	-				
	inventor					
VIII-2	Declaration as to the applicant's	-				
:	entitlement, as at the international filing date, to apply for and be granted a	,				
	patent					
VIII-3	Declaration as to the applicant's	_				
	entitlement, as at the international filing					
	date, to claim the priority of the earlier					
	application					
VIII-4	Declaration of inventorship (only for the purposes of the designation of the	-	İ			
	United States of America)		•			
VIII-5	Declaration as to non-prejudicial					
• • • •	disclosures or exceptions to lack of					
16-	novelty					
IX	Check list	number of sheets	electronic file(s) attached			
IX-1	Request (including declaration sheets)	-				
IX-2	Description	39				
IX-3	Claims	5 -				
IX-4	Abstract	1 EZABSTOO.TXT				
IX-5	Drawings	11 -				
IX-7	TOTAL	60				
	Accompanying items	paper document(s) attached	electronic file(s) attached			
IX-8	Fee calculation sheet	✓				
IX-9	Original separate power of attorney	✓	-			
IX-17	PCT-EASY diskette	- Diskette				
IX-18	Other (specified):	Revenue stamps of	-			
		transmittal and				
	1.	search fee for	1			
	-0	receiving offic	ļ			
IX-18	Other (specified):	Submission of	_			
		certificate of				
		payment for				
	·	international fee				
19/45		International lee				
IX-19	Figure of the drawings which should accompany the abstract					
IX-20	Language of filing of the	English				
X-1	international application Signature of applicant, agent or					
A-1	common representative	4.75	*			
	Common representative	(Page 1)	<u>}</u> }			
		-	9!			
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2 (7)			

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	

PCT REQUEST

Original (for SUBMISSION) - printed on 24.06.2003 11:02:58 AM

R03089 PCT

10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application				٠,	- .
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)					
10-5	International Searching Authority	ISA/JP				
10-6	Transmittal of search copy delayed until search fee is paid					

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by	
	the International Bureau	